CLAIMS

1. A plasma air dust collector, comprising:

a first electrode fixing unit having a dust collecting electrode power terminal;

a second electrode fixing unit arranged with a certain distance from the first electrode fixing unit to have a discharge electrode power terminal;

at least two dust collecting electrodes as electric conductors installed between the first electrode fixing unit and the second electrode fixing unit in the length direction and connected to the dust collecting electrode power terminal in order to form an internal surface and a side surface thereof as dust collecting surfaces; and

a discharge electrode as an electric conductor arranged between the dust collecting electrodes in the length direction and connected to the discharge electrode power terminal in order to apply a high voltage.

2. The plasma air dust collector of claim 1, wherein the first electrode fixing unit and the second electrode fixing unit are insulators.

3. The plasma air dust collector of claim 1, wherein each dust collecting electrode is connected to the first electrode fixing unit and the second electrode fixing unit as one body.

4. The plasma air dust collector of claim 3, wherein each dust

collecting electrode is constructed with a body as an insulator and a conductive nickel gold-plate film covering the body.

5. The plasma air dust collector of claim 1, wherein each dust collecting electrode is formed as a bar shape having a rectangular section.

6. The plasma air dust collector of claim 1, wherein each dust collecting electrode is formed as a bar shape having a h-shaped section.

7. The plasma air dust collector of claim 1, wherein each dust collecting electrode is constructed with a body as an insulator and a conductive nickel gold-plate film covering the body.

8. A plasma air dust collector, comprising:

a first electrode fixing unit having a dust collecting electrode power terminal;

a second electrode fixing unit arranged with a certain distance from the first electrode fixing unit to have a discharge electrode power terminal;

at least two dust collecting electrodes as electric conductors installed between the first electrode fixing unit and the second electrode fixing unit in the length direction and connected to the dust collecting electrode power terminal in order to form an internal surface and a side surface thereof as dust collecting surfaces;

a discharge electrode as an electric conductor arranged between

the dust collecting electrodes in the length direction and connected to the discharge electrode power terminal to apply a high voltage; and

a dust collecting electrode combining means for combining the both ends of each dust collecting electrode respectively with the first electrode fixing unit and the second electrode fixing unit detachably.

9. The plasma air dust collector of claim 8, wherein each dust collecting electrode is connected to the first electrode fixing unit and the second electrode fixing unit as one body.

10. The plasma air dust collector of claim 8, wherein each dust collecting electrode is constructed with a body as an insulator and a conductive nickel gold-plate film covering the body.

11. The plasma air dust collector of claim 8, wherein each dust collecting electrode is formed as a bar shape having a rectangular section.

12. The plasma air dust collector of claim 8, wherein each dust collecting electrode is formed as a bar shape having a h-shaped section.

13. The plasma air dust collector of claim 8, wherein each dust collecting electrode is constructed with a body as an insulator and a conductive nickel gold-plate film covering the body.

14. The plasma air dust collector of claim 8, wherein dust collecting electrode combining means includes:

a terminal protrusion formed at the bottom end of each dust collecting electrode in the length direction so as to be connected to the dust collecting electrode power terminal;

a terminal protrusion insertion hole formed at a side of the first electrode fixing unit so as to receive the terminal protrusion;

a combining protrusion formed at a side of the first electrode fixing unit ; and

a combining groove formed at the both ends of each dust collecting electrode so as to receive the combining protrusion.